

Prosody Can Outrank Syntax

Work in Optimality Theory has in general tacitly assumed the modular division between syntax and phonology espoused by Zwicky and Pullum 1986: syntactic structure is determined without any reference to phonology, while the phonology is in certain respects dependent on syntax. Defending this position, Golston 1995 has argued that phonological constraints can decide between morphosyntactic equivalents, but that syntactic constraints nonetheless outrank phonological ones in parallel evaluation. I argue for a different view, in which prosodic alignment constraints (McCarthy and Prince 1993) have the power to choose between morphosyntactic non-equivalents, in favor of a more marked syntactic or morphological structure.

The evidence for this argument comes from French, wherein portmanteaux like *du* ‘of the (m.s.)’ and *au* ‘to the (m.s.)’ block their periphrastic counterparts *de le* and *à le*. This is true not only of simple prepositional phrases (1); but even when the preposition and determiner would otherwise be non-adjacent within a coordinate structure, the portmanteau still blocks the periphrastic (2) (Miller 1992). On the other hand, when what follows is a vowel-initial word, the periphrastic (with syncope of schwa) is selected over the portmanteau, presumably to avoid hiatus (3). It is this last selection which relies on ranking a phonological constraint – ONSET – over a constraint on syntax.

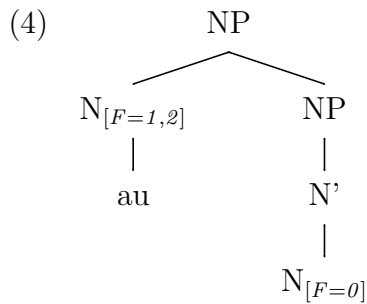
Specifically, that constraint is *PROJECT. Taking up a proposal by Grimshaw (2005:53), I argue that blocking of periphrastic preposition-determiner forms by portmanteaux can be derived by syntactic economy constraints. However, contra Grimshaw, I claim that syntactic economy cannot be adequately measured in terms of edge alignment, but in terms of the constituent hierarchy. Meeting this demand, *PROJECT punishes extensions of lexical projections: the higher a structure is built, the less economical it is.

The *PROJECT analysis requires each portmanteau to correspond to a single node in the extended nominal projection. This node (of category N) has two F-values – features which locate heads at particular levels within an extended projection (Grimshaw 2005). Namely, it has F-values that otherwise correspond to separate preposition and determiner nodes. In this way, portmanteaux minimize the amount of structure in the extended projection (shown in (4)), thereby incurring fewer violations of *PROJECT. This accounts for the first observed blocking effect.

Grimshaw’s syntactic alignment constraint COMPLEFT (“Count a violation for any complement not aligned with the left edge of its XP”) can correctly select portmanteaux in simple PPs, but crucially cannot decide between coordinate structures like (2a) and (2b), because the same number of complements (three) are out of alignment in each. Edge-alignment is inadequate as a measure of syntactic economy. *PROJECT, on the other hand, succeeds in selecting (2a) over (2b), because (2b) has three NP nodes in the extended projection of *garçon*, while (2a) has only two.

But while portmanteau structures are less marked in terms of economy, portmanteaux are themselves blocked by periphrastics when the result better satisfies ONSET. This interaction, in which a prosodic alignment constraint selects a more marked syntactic structure, suggests that at least some phonological constraints may outrank syntactic constraints in parallel evaluation. Here, ONSET must outrank *PROJECT (5), or some comparable economy constraint, in order to produce the correct structure.

- (1) a. du père
of.the father
'of the father'
b. *de le père
of the father
- (2) a. à la fille et au garçon
to the daughter and to.the boy
'to the daughter and the boy'
b. *à la fille et le garçon
to the daughter and the boy
- (3) a. á l'asile
to the'asylum
'to the asylum'
b. *au asile
to.the asylum



- (5) Phonology outranks syntax

| | TO(THE(asylum)) | ONSET | *PROJECT |
|---|------------------|-------|----------|
| ☞ | [à [l' [asile]]] | | * |
| | [au [asile]] | *! | |

References

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